X-Series Recorder Modbus Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RS485</strong></td>
<td></td>
</tr>
<tr>
<td>Baud Rate</td>
<td>19200</td>
</tr>
<tr>
<td>Byte Option</td>
<td>N – 8 – 2</td>
</tr>
<tr>
<td>Line Turn Around</td>
<td>3 ms</td>
</tr>
<tr>
<td>Reply Delay</td>
<td>0 ms</td>
</tr>
</tbody>
</table>

*Slave Device*
- **Enable**: Yes
- **Friendly Name**: UDC 2500 or unique device name
- **ID**: ID number from the UDC2500
- **Port**: RS-485
- **Protocol**: Modbus (FPLB)
- **Transaction 1**: In 73 1

*Transaction 1*
- **Enable**: Yes
- **Direction**: In
- **Command**: Input Register 4
- **Data Type**: IEEE Float
- **Dec. Start Addr**: 73
- **Number of Items**: 1

---

**Slave Configuration**

1. Set the UDC 2500 Baud Rate to 19200 typically and the data byte to N – 8 - 2.
2. Set the UDC 2500 TX Delay between 5 -10 ms, the value will depend on the cable lengths used between devices.
3. Connect the UDC2500 to the X-Series Recorder, see diagram.

**Master Configuration**

4. Enter Recorder Setup menu and select the following buttons, Comms> Services> MODBUS> RS485, in the RS485 menu, enter the Settings, shown in the table to the left.
5. Press the back button and now select the Master option; from this menu. Enable master and select the first available Slave 1-32.
6. From the slave menu, Enable the slave and copy the Slave settings from the table opposite into the relevant fields.
7. Select the Transaction 1 field, Enable this field and copy the Transaction 1 settings, from the table opposite into the relevant fields. Note this will send back analogue 1 readings only, refer to UDC2500 Modbus register map for other outputs.
8. To display analogue 1 readings from the UDC2500 on the X-Series recorder, enter the SCV[*1,1,1] statement, into the Edit Maths field on a spare Pen. Note the * will be a number between 1-32 depending which Slave was enabled.

SCV[1,1,1]  
Serial Comms Variable, Slave No, Transaction No, Item No.